

ABSTRACT

A solid electrolytic capacitor includes a valve metal sheet having a porous portion on one side of the sheet, a dielectric layer formed on the porous portion, a solid electrolyte layer formed on the dielectric layer, a collector layer formed on the solid electrolyte layer, a through-hole electrode connected to the collector layer and penetrating the valve metal sheet to be exposed to the other side of the sheet, and an electrode terminal insulated from the through-hole electrode and connected to the valve metal sheet. The capacitor further includes an insulating portion penetrating the valve metal sheet and a penetration electrode penetrating the insulating portion. The solid electrolytic capacitor has a large capacitance and an excellent radio frequency response, and can be easily mounted on a semiconductor device.